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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,567	04/03/2006	Peter Joseph Unsworth	BKT-004US	5511
959	7590	12/08/2006	EXAMINER	
LAHIVE & COCKFIELD, LLP ONE POST OFFICE SQUARE BOSTON, MA 02109-2127			TSAI, CAROL S W	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 12/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/516,567

Applicant(s)

UNSWORTH ET AL.

Examiner

Carol S. Tsai

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, and 4 is/are rejected.
- 7) ☒ Claim(s) 3 and 5-17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 5-16 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 3. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S.

Patent No. 5,463,904 to Kalinoski.

With respect to claims 1, 2, and 4, Kalinoski discloses a method of monitoring fluid flow in a closed conduit (conduit 22 shown on Fig. 1) including the disposition of a flowmeter (turbine flowmeter 26 shown on Fig. 1) through which the fluid to be monitored flows, generating a signal indicative of at least one characteristic of the fluid flow, characterised by measuring the signal components and retaining the fluctuations associated therewith, and analysing the said signal components and fluctuations to determine the at least one characteristic of the fluid flow (see Abstract, lines 1-12; col. 2, lines 12-30; and col. 4, lines 1-43).

*Allowable Subject Matter*

4. Claims 3 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kleven discloses a method and apparatus measuring a parameter of a flowing fluid at a first location.

Kleven et al. disclose a method and apparatus measuring a fluid flow using generated vortices.

Kolahi discloses a method for online-determination of at least one characteristic value of a mass flowmeter operating by the Coriolis principal and incorporating a fluid-conducting Coriolis conduit.

Kleven et al. disclose a method for measuring fluid flow including generating vortices in a fluid and relating the fluid flow to a first set of fluid parameters to obtain a first relationship, and relating the fluid flow to a second set of fluid parameters to obtain a second relationship.

Kalinoski discloses a sensor for use in a vortex flow meter which is capable of measuring various physical characteristics of a flow in a single process penetration from a common source.

Herzl discloses a two-wire transmission system for a vortex-type flowmeter adapted to

Art Unit: 2857

measure the flow rate of fluid passing through a conduit by generating fluidic oscillations giving rise to periodic pressure pulses whose repetition rate varies in accordance with flow rate.

Herzl discloses a two-wire transmission system for a vortex-type flowmeter whose sensor generates a low-level a-c signal having a frequency that depends on flow rate, the signal being fed to the input of a pre-amplifier adjacent the meter.

McMurtrie discloses a fluid mechanical arrangement of a bluff body flowmeter in a pipe line with a thermal sensor arrangement for sensing flow signals in that pipe and with a method and circuit for processing the sensed signals to subtract low frequency fluid noise signal that accompany sensed signal and extracting sensed signals related to the fluid flow rate through the pipe.

### ***Contact Information***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol S. Tsai whose telephone number is (571) 272-2224. The examiner can normally be reached on M-F(8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2857

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cswt

December 7, 2006

Art Unit 2857



CAROL S.W. TSAI  
PRIMARY EXAMINER